

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: sigcom@juno.com (Stephen M Smith)
Subject: [3821] "free" parts
Message-ID: <19960908.145056.7415.0.sigcom@juno.com>

I'm always looking for equipment and accessories that are willing parts "doners" for my projects and this week I discovered a neat supply of "mini UHF" jacks. Mini-UHF connectors, for those of you not familiar with cellular, look like a tiny PL-259/SO-239's and are the connectors that are used on some on-glass antenna couplers and on all Motorola vehicular cellular phones. I was removing a phone from one of my customer's vehicles and he had a Mobile Mark on-glass antenna which didn't survive the removal (I estimate that about 50% of on glass antennas are not worth re-using). So I ripped open the coupling box (the part that sticks on the inside of the vehicle glass) and there was the neatest little flange mount mini-UHF jack. After I got back to the shop, I looked around in some of the junk boxes, and I found a couple more scrap antennas with scroungable jacks. One was a Cellwave Glass Advantage and the other one was some non-descript offshore manufactured thing. Both of these antennas had bulkhead mount jacks using a hex nut to secure and the imported one has a gold plated center socket and Teflon insulation.

I think that these jacks would be real neat for QRP projects, as they small, not lossy at HF and the crimp plugs for RG-58 size cable usually run in the \$1.00-2.00 range, less expensive than a BNC. Also most of the time, if the antenna is junked, the feedline is not re-used either and those will usually be 10-15 feet of RG-58 style cable, sometimes double-shielded, with the plugs crimped on, great for jumpers and test cables.

So make friends with your local two-way/cellular phone shop, if they're not a scrounger like me, you might be able to get them to save their cast-off antennas for you.

73.....Steve, WB6TNL QRP-L #621

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: Ron Giuntini <rong@slip.net>
Subject: [3784] 49 er toroids
Message-ID: <E0uzc9x-00026A-00@mouse.slip.net>

I forgot...what type of wire, how many turns do you use to replace the chokes on the PA on a rev B board?

Ron KB6GK
NorCal #1718

San Francisco

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: SNickrand@aol.com
Subject: [3824] 49er Loudness Solved (Sort of)
Message-ID: <960908185304_197128186@emout08.mail.aol.com>

OK--I started out with the torioid for RFC1, no sound. Went back with the original 2.2 uH choke and fixed a bad solder joint elsewhere, low audio. Tried the LM380 feedback mod, low audio. Found out, by accident, that when I touch the foil common to C1, C20, C2, RFC1, C7 with a metal screwdriver, which my finger touches the metal of-- I HAVE LOUDNESS. Sorry about shouting. Obviously I have changed the capacitance of the circuit by doing this. Any ideas on how to get it loud without having to touch it?

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: NoesisDG@aol.com
Subject: [3805] Berlin Files on Index Labs QRP+/QRP++
Message-ID: <960908121116_518247878@emout08.mail.aol.com>

Can anyone help me with a URL (preferably to an English language web page) for a Berlin QRP club that carries mods and firmware changes for the Index Labs QRP++/QRP++?

When I spoke to Bruce Franklin at Index Labs some time ago he mentioned that there was a group of enthusiasts in Germany who had disassembled and commented at least part of the firmware coding for the QRP+ (it tickled him that someone was taking the time to do that). He's not on the Internet so couldn't provide any URLs.

I have a couple of firmware mods (one to change the fast tuning rate for the frequency dial) that I worked out with Bruce but would like to see more.

Thanks guys!

David Gwillim KB2TQX/QRP QRP-L #679

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: "Kelly Ellison" <kelman@dialnet.net>
Subject: [3831] but what about a skeleton Cone?

Message-ID: <199609090331.WAA05851@shell.dialnet.net>

Hello all,

Since Fall is a time when we get a break from the heat and Humidity here in the Ozarks... It's antenna construction time. With all of this talk about zepp antennas, It made me think of a design I used to see in the QRP circles for the "skeleton cone" Antenna. If memory serves me... it was like a center fed zepp with FOUR wires hooked to the 300 or 400 ohm feedline. Is anyone still running this kind of antenna? How does it work? I would like to hear about your experiences.

Thanks,

Kelly Ellison - kelman@dialnet.net

WB0WQS

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: k5zty@hamgate2.w5-f6cnb.ampr.org
Subject: [3817] center fed Zepp???
Message-ID: <14821@sugarland.ampr.org>

I have seen several references to center fed Zepp antennas here and other places. Can someone tell me or draw me a picture of one. The Zepp antenna I know of is an end fed long wire, originally designed to trail behind the Zeppelin airships. How do you center feed one of those?? The people who have these center fed Zepps seem to like them so, I would like to try one myself.

72,

Bill, K5ZTY

THE KEY TO SUCCESS!
USE IT.

WITHOUT CW, IT'S JUST CB.

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: GREGOIRE@ENDOR.COM (ERNEST GREGOIRE)
Subject: [3818] code trainer
Message-ID: <199609082051.QAA114019@nss2.CC.Lehigh.EDU>

If anyone in this group has any experience using the "Pocket Morse Code
>Trainer" as sold by Computer Aided Technology of Dallas, your comments
>would be appreciated.

>tnx

>

>W9UQB Mike (Phoenix)

Hello Mike,

I have been using that trainer since my business trip to Dallas Tx. in 1994.
The unit is fun to use and I carry it around constantly. I use it at odd
times like mowing the lawn. The sound of the code can easily be heard by
putting a pair of shooting ear protectors, (head phone type). I also put a
soft ear plug in the other ear to further muffle the sound of the mower.

So this summer I mowed at 30 wpm. No, I can't do a solid copy at that speed.
But It does keep me in practice, so much so that I don't have to spend as
much catch up time when I start a contest. Like a lot of folks I have lots
of things to keep me busy in the summer, and I don't get on the air as much
as I'd like to. This device keeps me honest. I use it in the car, as well as
at boring meetings. Some days code just seems right, and I can copy great.
Other days, I just can't seem to copy hardly at all.

I find that a half hour in the morning and a half hour in the evening is
good for me. On days that are especially tiring, I don't do as well. But it
does keep my ear tuned up for "Hearing the Language".

My goal is to become a dynamite code operator. I'm not that yet, so, I
practice every chance I get. I know that on the air is the best, but when
that is impossible, then this is a good substitute.

de AA1IK
Ernie

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: NoesisDG@aol.com
Subject: [3799] Copper Foil Tape Source

Message-ID: <960908100502_518197285@emout16.mail.aol.com>

I don't know how much the TapeTenna from HamCo costs, but perhaps the following might provide a cheaper alternative. Somebody correct me if I'm wrong.

An alternative source for various widths of self-adhesive copper foil tape is a stained-glass supply house. The tape is usually about 1.25 mil thick (.00125") and comes in around 36 yard spools in various widths from as little as 1/8" up to at least 1/4" wide. Cost is about \$3 to \$5 per roll, depending on width, from the discount houses like "Anything In Stained Glass" who sell the Edco brand of foil tape in the following sizes 5/32", 3/16", 7/32", 1/4", 5/16", 3/8" and 1/2".

For those interested:

Anything In Stained Glass
PO Box 444
Rio Grande, NJ 08242
Orders: (800) 462-1209
(800) 231-5422 (FAX)
Questions: (609) 886-0416

Stained glass is one of my "other hobbies". Usual disclaimers with regard to the company named above apply.

Brag Time: There was a little bit of an opening to Europe from here in New York (Long Island) on 20 meters yesterday although the background noise was still around S5 at my QTH. I broke a small pileup and spoke (SSB) to G3TBK in Lincolnshire, England (some kind of UK contest was in progress) and also to Z31VP (name of Zoran) in Macedonia. They were both QRO but I was running 5 watts SSB using my Index Labs QRP++ (love that radio!) using a center fed Zepp at around 45 feet.

"Solar Flux? We don't need no stinkin' Solar Flux!"

Guess the wind was blowing in my direction as Z31VP gave me an astonishing 59 (and no he wasn't contesting - don't-you-just-hate those 59 contest "reports" when you r-e-a-l-l-y want to know how well your signal is doing).

Those were my only two contacts in 30 minutes of operating yesterday as it was a family-gotta-get-some-things-done-day.

72/73

David Gwillim
KB2TQX/QRP

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: David Shalita <af389@lafn.org>
Subject: [3830] Crystal Can Osc and ID transistor
Message-ID: <32333778.480B@lafn.org>

Does anyone have a transistor cross reference to give us a specs for some transistors marked R1001, R1004, and R2004? Can I access this on the web?

I am trying without success to locate packaged crystal oscillators in the frequency range of 72 to 75 mhz and closer to 73 mhz, the better.

Thanks, W6MIK

--

Dave Shalita, af389@lafn.org

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: Jerry Parker <jparker@fix.net>
Subject: [3788] Dan's Summer Catalog Specials
Message-ID: <2.2.32.19960908054410.00be0d54@fix.net>

Dan's summer specials come to an end on September 15.

<http://www.fix.net/dans.html>

72,,,Jerry...K

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: Ron Giuntini <rong@slip.net>
Subject: [3785] Dans Parts
Message-ID: <E0uzc9z-00026A-00@mouse.slip.net>

Got my order in today.. I would say that I got my money's worth....got an assortment of stuff to fill up a junk bin.... Fun to sort out the grab

bags....What are those things that look like disc capacitors with three leads and ferrite beads on two of the leads?..Now I need a good project in QST that calls for parts "that should be readily available in your junk box.." Not affiliated with Dan's etc..

Ron KB6GK
NorCal #1718
San Francisco

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: Ron Giuntini <rong@slip.net> (by way of Jerry Parker <jparker@fix.net>)
Subject: [3787] Dans Parts
Message-ID: <2.2.32.19960908054146.00be6cb8@fix.net>

Dan's Cataglog is online: <http://www.fix.net/dans.html>

72,,,Jerry...WA6OWR...K

>Got my order in today.. I would say that I got my money's worth....got an
>assortment of stuff to fill up a junk bin.... Fun to sort out the grab
>bags....What are those things that look like disc capacitors with three
>leads and ferrite beads on two of the leads?..Now I need a good project in
>QST that calls for parts "that should be readily available in your junk box.." Not affiliated with Dan's etc..

Ron KB6GK
NorCal #1718
San Francisco

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [3795] First F Sighting
Message-ID: <199609081214.MAA21838@chuck.dallas.sgi.com>

Gang,

1206UTC September 8, 1996. Sitting here early in the a.m. and had SWL-40 on listening to some high speed stuff from the north of the Red River.

Tuned around 7.040MHz and didn't hear anything but left receiver at the 7.040 area. De Javu. Yesterday at the NORTEX meeting we talked about hearing a signal below the noise level and I detect a faint regular pattern just below the noise level. Sharpen up the senses and sure enough it is the regular beat of the letter F in morse at about 10wpm.

OK, I'm off to the bottom of the band to look for a KL7. I have heard a KL7 on 30M three nights during the last week. Kinda of funny. I walk into living room and say "Phyllis, guess what? I heard another KL7!!" and she says "Oh, another Alaska huh?". I asked her if she knew what a KH6 was and she didn't so things are still OK. :-)

So back to the beacon. 40M may be in great shape this winter, but one bird does not a summer make.

:-)

dit dit
Chuck Adams (K5FO CP-60) adams@sgi.com

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: launerb@crl.com (William H. Launer)
Subject: [3804] Forwarded ATU discussion (long)
Message-ID: <v01530503ae589c9351e5@[192.0.2.1]>

QRP Gang,

I received the following messages from the "Boatanchors group. Although the comments are in reference to qro experiences, I think they're appropriate for qrp operations as well. The thread started out as a query about ATU's for receiving; hence the subject "Receiving Ant couplers.

The senders graciously gave permission to repost, and are willing to answer questions via e-mail.

Since most qrp rigs are solid-state and have fixed impedance outputs you will need to either add some voltage protection or take some precautions to ensure that the output transistors are protected during tuneup.

72/73 Bill wb0cld

----Forwarded messages follow-----:

From: w5tvw1@juno.com (Elliot "Sandy" V Blaize, Jr.)

Subject: Re: "Receiving" ant couplers

The simple "L" section antenna tuner is still one of the best things since "sliced bread". I have used one regularly on various "BA" transmitters like the DX-60 and simple one tubers very effectively. The inductor in 'series' with the RF path and the capacitor in 'parallel' with the RF path....either on the antenna side or the transmitter side of the inductor....depending on the antenna. The inductor having some means of adjustment. A small modified alligator clip (copper one preferably) shorting un-needed turns works fine.

FORGET completely about "SWR", it makes no difference with an end fed wire and short feeder between the transmitter and coupler (1-15' or so). What IS important is some means of measuring relative current or voltage at the output of the tuner! For voltage, a simple neon glow lamp or old 0A2, 0B2 VR tube is OK. For current, a thermocouple type RF ammeter (expensive!) or a little toroid transformer and a #47 or #44 pilot lamp. Wind 2-5 turn primary (which goes in series with the antenna) and a 5-15 turn secondary (which goes to the #47 or #44 pilot lamp.) I use a bayonet socket for the lamp and use a #47 or a #120MB lamp. The 120MB lamp will detect a very low current and will stand a fairly high power level at the same time. You will have to experiment with the number of turns for your typical application, not critical! Use a small "50" or "80" series red coded Amidon iron core or a relatively low permeability ferrite core. You could even get by with a piece of ferrite rod from an old BC band sand state radio "loop"!

Tune everything for maximum current or voltage indication depending on band used ,antenna length. You will find if you are "voltage feeding" the wire, it will light the dickens out of the neon and the pilot lamp will be weak. If you are "current" feeding the wire, vice-versa! Again, if you are using a transmitter with "TUBE" final amps that's TUNED and not a broadband "no-tune" output circuit, FORGET what the VSWR is! Naturally, if you are running 100 watts or more it may make a difference, but for 100 watts or less FORGET the SWR! [I won't go into WHY you should forget SWR, as it becomes very involved! [If you REALLY want to know WHY, get a copy of Maxwell's "Reflections" published by ARRL. It's all explained there in detail!] Tune up for maximum "fire-in-the-wire"! (Keeping within plate current limits, of course!)

73

E. V. Sandy Blaize, W5TVW

Boat Anchors collected, restored, modified, traded and used!

w5tvw@juno.com -or- ebjr@worldnet.att.net

417 Ridgewood Drive, Metairie, LA., 70001

From: JOHN_SEHRING.parti@ecunet.org

Subject: ANTENNA COUPLERS

Sandy says to forget about SWR when using tube type xmtr & home brew ant coupler, but...

Line loss due to high SWR is not the issue here (there **is** essentially no line between xmtr & coupler). However, most of these novice xmtrs used pi-network output and they need to see about 25 to 150 ohms or so to get max output, efficiency and harmonic suppression.

Having 4 controls (xmtr plate and coupling, and tuner L and C) to adjust can make you crazy. That's a lot of permutations & combinations. I know, I used just such a setup in my novice days! It took me a while to figure out how to do it right.

A better way is to first tune up the xmtr for max output into a 50 ohm dummy load. Then connect ant tuner and adjust it for max current or voltage (leave the xmtr alone). That way you're making the ant tuner transform the antenna's impedance to a 50 ohms resistive load for the already-tuned-up-into-50-ohms xmtr.

Only 2 controls at a time need to be twiddled.

-John Sehring (09/06/96 10:53 am MT @Baker, Montana) UCC wb2eqg

From: JOHN_SEHRING.parti@ecunet.org

Subject: RE: ANTENNA COUPLERS

> Since most qrp rigs are solid-state and have fixed impedance outputs
> (ugh!), your tuneup procedures are certainly appropriate. I will warn
> them that they need to either add some voltage protection or take some
> precautions to ensure that they protect their output transistors during
> tuneup.

Yes, good idea. If rig has drive control to reduce power, then after full-power tuneup into 50 ohm dummy load, reduce power when first connected to ant tuner, get things roughly tuned, then full power again.

If SWR indicator is available (I know, this is not as simple as two lite bulbs but **may** be important depending on how intolerant your output transistors are to a mismatch) it's nice to have, but neon & incandescent lites on coupler output will certainly do (they both need to be small enuf in ratings to glow at QRP power levels).

Another way (but again we're getting away from **simplicity**) is to use a noise bridge & receiver to indicate when ant coupler is presenting 50 ohms resistive to the rig.

I use mostly non-resonant antennas here. My philosophy: put up as much wire as high as you can. Then use antenna matcher, e.g. Johnson Matchbox.

-John Sehring (09/07/96 10:21 am MT @Baker, Montana) UCC wb2eqg

Bill Launer
St. Charles, MO
launerb@crl.com
wb0cld@wb0cld.ampr.org [44.46.66.25]
qrp-l #279 qrp arco #3551
Grid Square EM48RT

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: David Adams <dave@flowserver.stem.com>
Subject: [3819] Help me identify....
Message-ID: <9609082116.AA13675@flowserver.stem.com>

Greetings!

I have just been digging through my junk box and came across a pile of surface mount components (which my wife can be seen buying on goofy british airways documentaries). I have identified and found potential uses for all but the following:

A stack of identical SMD ICs GE/RCA #: 89830 (CD4071BK).

I spose if I had a national semiconductor book lying about I could look up the cd number, but I don't. So any pointers as to a use. I have 14 of the things...I spose they would make a neat set of earrings if nothing else.

Any pointers are appreciated.

73 de dave, n9uxu

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: "Bowes, Fr. Bruce" <GBB1@MUSICB.MARIST.EDU>
Subject: [3809] Int'l callsign - where
Message-ID: <08SEP96.13816998.0317.MUSIC@MARISTB.MARIST.EDU>

Does anyone know of where one might find int'l callsigns on the Web besides Buckmaster and QRZ?
Fr Bowes

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: Luke Enriquez <ecsclfe@lux.latrobe.edu.au>
Subject: [3796] Inverted - V Problem
Message-ID: <9609081323.AA26506@lux.latrobe.edu.au>

Howdy,

I was asked to set up a HF antenna for 80m for a particular scouting event. It was to be used for short range low power comms, say a 20km radius. I chose and Inverted-V. I'm not sure if that was a good idea.

I used a RSGB publication to get the dimensions for the V. It was easy to build with heavy duty multi-strand power cable. I connected to RG-58 coax directly to the feedpoint, and of course used some plastic pipe to take the tension of the joint.

I realise its not the best system, because the feedpoint may not be 50 Ohms. But I had a small choke (some wound up coax) just after the feedpoint.

The problem is we cant get the SWR down below 3:1. This is not what I wanted. Usually I can tune anything up with my tuner, but not this antenna. I dont have time to build another antenna, and I'm going back to the spot on Wednesday to see if I can get the SWR down.

Keep in mind I was only given time for a quick look at the SWR. Everyone wanted to get home as it was late in the day when we finallyt set the antenna up (after 4 hours of recovering non-4wd vechiles from a 4wd track).

What is the best procedure I should take. Someone said that I should change freqs (up a bit) and (down a bit) to see if the antenna is too long or too short. I know its close (+- 1 meter). I'm just wondering why the tuner cant cope with that error.

Regards,
Luke

--

Luke Enriquez VK3DLE	"I only cook with Non-violent
3rd Year Electronic Engineering	fruit that pulps itself."
Latrobe University, Victoria, Australia.	
ecsclfe@lux.latrobe.edu.au	

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From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: "Denton Bramwell" <denton@cyber-west.com>
Subject: [3820] ken/K5id/hw-99
Message-ID: <01BB9D9C.58299600@cyber-west.com>

The HW-99 was something the League lobbied Heath to do... never was much of a market success, but, as you say, is capable of of very decent performance.

What you have is undoubtedly an engineering unit. Before Heath would release any product to the market, half a dozen volunteers would have to build one. There were sometimes imperfections at that point, but every nut and bolt was either in the "proof build" pack, or accounted for.

If you are getting that much drift, simple heating/cooling isn't going to fix it. I'm not terribly familiar with the innards of the beast, but I suspect that you'll need to get the L and C temperature coefficients under control. Also, you might consider changing out the VFO oscillator FET. The MPF102 is a major culprit in drift problems.... gain vs. C specs are very very loose. Use something from the 2N4416 family if you can.

Cam Hartford published a mod for the HW-9 that fixed the dynamic range problem and changed the filter from 2.5 KHz wide and 50 dB deep to 500 Hz wide and 80 dB deep. It was in QRP Quarterly a few years back. I probably have enough of the right crystals on hand if you want to try the same mod on your 99.

Sadly, at the time the HW-9 and 99 were designed, there was no one in the ham department at Heath that understood some of the subtleties of intercept, gain distribution and proper filter termination, hence funny filter responses, and poor dynamic range.

The HW-8 was, for the most part, based on Wes Hayward (W7ZOI) ideas for the improvement of the HW-7, so, of the three Heath QRP rigs, it was by far the most solid design.

BTW, I have an HW-8 with variable bandwidth tuning, and that's a lot of fun to listen to--open up to 1 or 1.5 KHz for looking, and narrow down to 400 Hz for working.

Denton
K7OWJ

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: bob.roach@sourcebbs.com (BOB ROACH)
Subject: [3815] Low Power SSB
Message-ID: <8C7F339.00010420EB.uuout@sourcebbs.com>

Hello Guys,

Is any one out there doing QRP SSB. I would like to get involve in this with some homebrew equipment (tube type if possible). Any help or comments would be greatly appreciated.

73 de KE4QOK
Bob

* SLMR 2.1a * When marriage is outlawed, only outlaws will have inlaws.

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: "David D. Meacham" <ddm@datatamers.com>
Subject: [3782] Mod for NorCal Cascades with steel-case, "JK" xtals.
Message-ID: <Pine.LNX.3.91.960907210139.15988A-100000@dt1.datatamers.com>

Gang,

This mod applies ONLY to the last 50 kits sold. They contain different crystals than those in the first 200 kits. This situation was beyond Doug's control. He asked me to post this modification which improves the performance of the crystal filter.

The first 200 kits sold by NorCal had aluminum cases. The second batch (50 kits) had nickel-plated steel cases with the "JK" label. This mod is for the kits with crystals having the "JK" label.

The mod is based on computer simulation using Wes Hayward's GPLA program. I have had excellent results using this technique in the past. No one has built a filter using this mod, although at least one VE7 may be doing so soon. The mod consists of replacing all but one of the capacitors in the crystal filter with new ones having different values.

Predicted-performance comparisons follow:

Stock Values:

Bandwidth (-6dB): 4.1kHz

Return Loss: Deep valley at 28dB, non-symmetrical.
Passband: Rounded top.

Modified Values:

Bandwidth (-6dB): 3.0kHz
Return Loss: 18dB, symmetrical.
Passband: Flat top.

The capacitor changes follow:

Modified Values:

Change C78 and C80 to 68pF.

Change C77 and C81 to 91pF.

Change C82 and C83 to 130pF.

(C79 stays at 56pF)

I recommend using mica capacitors if possible, otherwise NP0 or C0G ceramic types.

72, Dave, W6EMD

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [3781] NORTEX meeting
Message-ID: <199609080422.EAA20235@chuck.dallas.sgi.com>

Gang,

We had the usual first Saturday of the month meeting of the NORTEX Club. I was severely beaten and chastised for not spelling NORTEX correctly in all my posts. I told Larry Jones that this group would come back at me for yelling. :-)

I brought the new OHR100 30M xcvr to the meeting for show and tell along with my 30M PVC dipole and a new antenna from N2CX called the PVC Gusher II Portable QRP Antenna available from Joe for \$20 shipped. He posted details earlier in the week.

I haven't cut it yet and put it up, but it is a real nice setup.

He uses RG-122/U coax which is slightly smaller than RG-58/U. He has a BNC on the end. Will work well with most of the QRP kits around today like the NorCal and SWL series. Adapter for others. I looked through every book I got and could not find anything on RG-122/U or Belden 9252. Email to me if you got the specs.

NORTEX discussed the upcoming contest for September 21. Look for surprises. :-) Also for the April QTTF also especially with respect to UFOs and paranormal events. I outta do it from Wink TX since a High School Government class teacher spotted a UFO during her watch of the GOC (Ground Observer Corp) back in the days when we were afraid that the USSR was going to try flying across the border knee high to a grasshopper. :-) (TX talk for flying real low for radar-avoidance) The US Government sent out several FBI people and others to interview her as I guess with the sound recording, radar, and other data they thought it musta been a valid sighting.

Oh back to the contest, the rules stipulate a max of 6 hours outta the 8. I think I've seen people post that they work 8 and take the best 6. We would like a rule clarification and think that only 6 hours should be worked - period. You can think of a whole bunch of scenarios that this would influence. Especially bands and the time slot you wanna work and setup.

Other topics included:

- a. dBm values and receiver sensitivity
 - b. multi-hop propagation
 - c. east coast vs. west coast to EU advantages
 - d. propagation from NV. Smitty got the same results I did from NV in that you can work N/S but not E/W. :-)
No wonder NV is one the top ten wanted states for WAS.
 - e. QRP-L
- and other topics too numerous to recall.

After the two hour meeting we adjourned to the BBQ place for another hour and a half of fellowship and discussion of QRP and the world in general.

Those in attendance included KK5NA, N5YAK, K5JHP, W5ISZ, N5TYD, N5OSG, KC5RAS, W5W0, KB2INO, NA5K, N5KSJ, KD5FJ, and K5F0.

dit dit

Chuck Adams (K5F0 CP-60) adams@sgi.com

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: chefrank@ix.netcom.com
Subject: [3814] other mailing lists
Message-ID: <199698125510141@ix.netcom.com>

hi gang:

at the last NORTEX meeting i mentioned that there is a mailing list for ham-homebrew.
well, Bill k5jhp said he heard of the ham-homebrew newsgroup and i found out that this
mailing list for ham-homebrew is a bidirectional gateway of that newsgroup.
anyway, i said
i would forward the address for the mailing list to the qrp-1 list. you can get the ham-homebrew mailing list in digest form i believe by adding "DIGEST" to the end of your
SUBSCRIBE command line. Is this the correct way to get the digest form???? I don't know
for sure, it's been so long since I did it.

Searching the web I also found a list of other list that I thought you might be interested
in. The list was compiled by AB6WM.

cul es 72/73
Frank Dameron N5TYD

Revised: August 5, 1995

Contest Forum

Subscribe	CQ-Contest-Request@tgv.com
Message	SUBSCRIBE
Reflector	CQ-Contest@tgv.com

DX Forum

Subscribe	DX-request@unbc.edu
Message	subscribe <name> (manual system)
Reflector	dx@unbc.edu

QRP Forum

Subscribe	listserv@netcom.com
Message	subscribe qrp-l
Reflector	qrp-l@netcom.com

VHF forum

Subscribe	Listserv@W6YX.Stanford.EDU
Message	Subscribe VHF
Reflector	VHF@W6YX.Stanford.EDU

N6TR Contest Logging program forum

Subscribe	N6TRLOG-REQUEST@CMICRO.COM
Message	SUBSCRIBE
Reflector	N6TRLOG@CMicro.COM

K1EA CT Contest Logging Program

Subscribe	ct-user-request@mlo.dec.com
Message	subscribe
Reflector	ct-user@mlo.dec.com

Ham Technical Forum

Subscribe	listserv@netcom.com
Message	subscribe ham-tech
Reflector	ham-tech@netcom.com

Tucson Amateur Packet Radio - Packet BBS Info

Subscribe	listserv@tapr.org
Message	subscribe bbssig FirstName LastName
Reflector	bbssig@tapr.org

Tucson Amateur Packet Radio - APRS

Subscribe	listserv@tapr.org
Message	subscribe aprssig FirstName LastName
Reflector	aprssig@tapr.org

Tucson Amateur Packet Radio - DSP

Subscribe	listserv@tapr.org
Message	subscribe dsp-93 FirstName LastName
Reflector	dsp-93@tapr.org

Tucson Amateur Packet Radio - HF Packet

Subscribe	listserv@tapr.org
Message	subscribe hfsig FirstName LastName
Reflector	hfsig@tapr.org

Tucson Amateur Packet Radio - Announcements and Bulletins

Subscribe	listserv@tapr.org
Message	subscribe tapr-bb FirstName LastName
Reflector	tapr-bbtapr.org

Email gateway to rec.radio.amateur.antenna

Subscribe	Listserv@ucsd.EDU
Message	SUBSCRIBE ham-ant
Reflector	ham-ant@UCSD.EDU

Email gateway to rec.radio.amateur.digital

Subscribe	Listserv@ucsd.EDU
Message	SUBSCRIBE ham-digital
Reflector	ham-digital@UCSD.EDU

Email gateway to newsgroup rec.radio.amateur.equipment

Subscribe	Listserv@ucsd.EDU
Message	SUBSCRIBE ham-equip
Reflector	ham-equip@UCSD.EDU

Email gateway to newsgroup rec.radio.amateur.homebrew

Subscribe	Listserv@ucsd.EDU
Message	SUBSCRIBE ham-homebrew
Reflector	ham-homebrew@UCSD.EDU

Email gateway to newsgroup rec.radio.amateur.policy

Subscribe	Listserv@ucsd.EDU
Message	SUBSCRIBE ham-policy
Reflector	ham-policy@UCSD.EDU

Email gateway to newsgroup rec.radio.amateur.space

Subscribe	Listserv@ucsd.EDU
Message	SUBSCRIBE ham-space
Reflector	ham-space@UCSD.EDU

Email gateway to newsgroup rec.radio.amateur.misc

Subscribe	Listserv@ucsd.EDU
Message	SUBSCRIBE info-hams
Reflector	info-hams@UCSD.EDU

Moderated email gateway to newsgroup rec.radio.info

Subscribe	listserv@ucsd.edu
Message	sub radio-info
Reflector	radio-info@ve6mgs.ampr.ab.ca
Or	radio-info@ucsd.edu

The HAM-RADIO mailing list is an experimental digest using subject grouping and MIME encapsulation to provide a daily dose of ham radio related traffic from the Usenet

Subscribe	Listserv@ucsd.EDU
Message	SUBSCRIBE ham-radio
Reflector	ham-radio@UCSD.EDU

Packet Radio List

Subscribe	Listserv@ucsd.EDU
Message	SUBSCRIBE packet-radio
Reflector	packet-radio@UCSD.EDU

KA9Q Unix Users Mailing List

Subscribe	listserv@knuth.mtsu.edu
Message	subscribe ka9q-unix <your name>
Reflector	ka9q-unix@knuth.mtsu.edu

Raider Amateur Radio Club Mailing List

Subscribe	listserv@knuth.mtsu.edu
Message	subscribe rarc-l@knuth.mtsu.edu
Reflector	rarc-l@knuth.mtsu.edu

KA9Q NOS BBS List

Subscribe	nos-bbs-request@hydra.carleton.ca
Message	add <user@site> nos-bbs

Reflector nos-bbs@hydra.carleton.ca

Old Radio Equipment

Subscribe boatanchors-request@theporch.com
Message subscribe boatanchors <name>
Reflector boatanchors@theporch.com

Shuttle Elements List

Subscribe listserv@thomsoft.com
Message subscribe <name>

ARRL Field Org List

Subscribe listserv@netcom.com
Message subscribe fieldorg-l
Reflector fieldorg-l@netcom.com

ARRL Exam List

Subscribe listserv@netcom.com
Message subscribe arrl-exam-list

ARRL VE List

Subscribe listserv@netcom.com
Message subscribe arrl-ve-list

ARRL New England Division Mailing List

Subscribe listserv@netcom.com
Message subscribe arrl-nediv-list

Boston Amateur Radio Club List

Subscribe listserv@netcom.com
Message subscribe barc-list

Eastern Massachusetts ARRL List

Subscribe listserv@netcom.com
Message subscribe ema-arrl

ARRL Official News and Information List

Subscribe	listserv@netcom.com
Message	subscribe w1aw-list

WY1Z Amateur Radio Newsline List

Subscribe	listserv@netcom.com
Message	subscribe newsline-list

ARRL Letter Redistribution List

Subscribe	listserv@netcom.com
Message	subscribe letter-list

BARC RACES Mailing List

Subscribe	listserv@netcom.com
Message	subscribe barc-races

Fox Hunt Mailing List

Subscribe	listserv@netcom.com
Message	subscribe fox-list

KY1N New England VEC Information List

Subscribe	listserv@netcom.com
Message	subscribe ky1n-list

University Amateur Radio Clubs

Subscribe	Listserv@W6YX.Stanford.EDU
Message	Subscribe ham-univ
Reflector	ham-univ@W6YX.Stanford.EDU

Stanford Amateur Radio Club (aka su.org.hamradio)

Subscribe	Listserv@W6YX.Stanford.EDU
Message	Subscribe w6yx-club
Reflector	w6yx-clubW6YX.Stanford.EDU

de AB6WM

72/73

Frank Dameron - N5TYD

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: Dave.Ackrill@westwood45.powergen.co.uk
Subject: [3811] Propagation Info.
Message-ID: <960908172051Z*/G=Dave/S=Ackrill/O=westwood45/PRMD=POWERGEN/
ADMD=CWMAIL/C=GB/@MHS>

Hi all,

I've been told that there is a newsgroup or list devoted to the subject of propagation. Does anyone know how to subscribe, and is it similar to the QRP-L list or does it send data relating to propagation?

Any info. greatly received as I've tried listing newsgroups etc., with little success.

Thanks - Dave (G0DJA)

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: SNickrand@aol.com
Subject: [3793] Receiver Comparisons
Message-ID: <960908071520_280021745@emout12.mail.aol.com>

Next time you want to see how your homebrew rig stacks up to a commercial rig--and-- you have one of those antenna tuners which accepts two or more antennas (switchable), just connect your antenna to the tuner's transmitter input and connect each radio to coax 1, coax 2 inputs, respectively. You can now easily switch the antenna between the two radios. I was pleasantly surprised to see how well my NorCal 40A stacked up against the Yaesu FT901.

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: Ron Giuntini <rong@slip.net>
Subject: [3786] RG 174U

Message-ID: <E0uzcA0-00026A-00@mouse.slip.net>

Best connectors for RG174U??? Any suggestions? Want to use for a portable dipole transmission line...

Ron KB6GK
NorCal #1718
San Francisco

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: wb2vuo@juno.com (William K Hibbert)
Subject: [3828] The Extended Double-Zepp
Message-ID: <19960908.205750.4799.0.wb2vuo@juno.com>

(Psst...Wanna double your power, for Free?)

Well, not for free, but almost so. Let's look at how one can "double" one's power. How, first of all, are we looking at your "power". One way is to look at the output of your rig. If you increased your output from 5 watts to 10 watts, there could be no argument that you had doubled your power. But, if your antenna had a gain of 2 [3dB], at the other end of your contact, it would LOOK like you had increased your power.

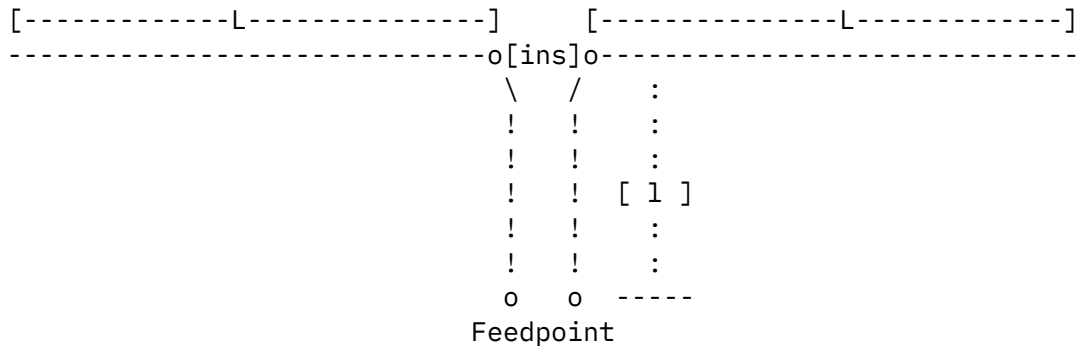
Now, about the "FREE" part of this discussion. The simplest, and least expensive antennas are wire antennas. To double your Effective Radiated Power [ERP], you need a gain of 3dB over your former antenna. Using a dipole as the reference, this would be expressed as 3 dBd, or 3 dB over a dipole. So, what "FREE" wire antenna will give us 3dBd?

One of the easiest, and cheapest is the Extended Double-Zepp, or EDZ. What it is, is two elements, fed in a collinear fashion, with each element extended from 1/4-wave long to 5/8-wave long. Many of the Antenna Books show this antenna fed via a 0.11-wavelength stub, which results in a 150-ohm feedpoint impedance. Nice, but when was the last time you saw 150-ohm feedline? So, you say, 'How do I feed my EDZ?' If you feed it directly with ladder line, either 300-ohm, or 450-ohm, the SWR on the line will be 2:1 or 3:1. With the inherent low loss of the ladder lines, this will never be noticed. The ATU you are using will tune out this mismatch, and make the transmitter happy. If you really insist on a 'flat' line for the antenna, then a 1/4-wave shorted line should be attached to the feedpoint, and your feedline should be tapped down to the correct spot on the line to match it. Using this method, you could even feed the EDZ with 50-ohm line. This would make the antenna a single-band antler, whereas the resonant feed

with the ladder line will allow you to run the antler on multiple bands.

The formulas used to calculate the lengths in an Extended Double Zepp are as follows:

Leg length (feet): $L = 600/F(\text{MHz})$
 Stub length (feet): $l = 108/F(\text{MHz})$



***NOTE: [ins] is the center insulator for the wire.....

If you want your EDZ to be the single band version, and not use an ATU, then the stub length, [l], should be equal to $246/F(\text{MHz})$, and the bottom of the stub should be connected together, with the feedline tapped up to the correct matching point. This point would need to be determined empirically, also known as "cut-and-try".

Page 2

HOW BIG IS IT???

This is a good question, and might be the disqualifying factor for some. Here is a listing, in tabular form with dimensions. I am listing it for the bands from 160 meters up, but I don't have the room for the lower bands, myself. [Wish I did, though].

FREQ (MHz)	L (Ft)	l (Ft)	Flattop Length (Ft)
1.85 MHz	324.3'	58.4'	648.6'
1.95 MHz	315.8'	56.8'	631.6'
3.60 MHz	166.7'	30.0'	333.3'
3.90 MHz	153.8'	27.7'	307.7'
7.15 MHz	83.9'	15.1'	167.8'
10.10 MHz	59.4'	10.7'	118.8'
14.20 MHz	42.3'	7.6'	84.5'
18.10 MHz	33.1'	6.0'	66.3'
21.20 MHz	28.3'	5.1'	56.6'
24.90 MHz	24.1'	4.3'	48.2'

28.40 MHz	21.1'	3.8'	42.2'
29.50 MHz	20.3'	3.7'	40.7'
50.20 MHz	12.0'	2.1'	23.9'
52.50 MHz	11.4'	2.1'	22.9'

As you can see from the chart, many of the dimensions for an EDZ are the same as a dipole for other bands. This helps explain why a center-fed antenna, fed with ladder line, will work so well on multiple bands. It is a 1/2-wave on one band, 1-wave on others, and EDZ on yet others. Another principle that allows one to "get away" with the ladder line feed system is the good old "Gootches' Principle", which states that "RF Gotta go SOMEWHERE!"

So, if you have the real estate, the time and the inclination, try out an EDZ in your Antenna Farm, and see what sprouts up in the bands...

72/73, Keith, WB2VUO, QRP-L #582
 Trustee, KB2YTW/B 10 Mtr Beacon (28.2860 MHz)
 "In the Depths of the Great Bergen Swamp...FN13ac"

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
 From: Russ1031@aol.com
 Subject: [3803] The KC-2--A Mighty Clever Device
 Message-ID: <960908114140_280102220@emout17.mail.aol.com>

I just finished installing a KC-2 in my Sierra and am tickled pink with the result. With the new panel from Wilderness Radio, you'd never now that this radio was, in reality, built by a dummy like me.

QRPers a lucky bunch of rascals. We have insanely gifted people, like Hendricks, Burdick, Benson et al, designing and distributing world class gear that we can build ourselves. Most importantly, we have a healthy culture. In general, we seem to be a thoughtful and generous group of men and women. That's worth honoring and protecting.

Russ Carpenter, AA7QU, McKenzie River, Oregon

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
 From: kgraham@CSWNET.COM (Kenton E Graham)
 Subject: [3794] Triton 1

Message-ID: <199609081146.GAA06609@troi.csw.net>

Hi ALL

Referencing Gary, WA2UAX's purchase of the Triton 1 for \$75.
Yeah, Gary, you got a deal. I have the Triton 2 which sold at the same time as the Triton 1, early 1970's. The T-1 had about 50 w output and the T-2 had about 100 w out. They are great cw rigs if they have the optional audio filter (goes in the early audio stages) and both will run qrp down to mw. It is one of my favorite cw rigs....

-73- Ken K5ID

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: "Robert J. Gobrick" <rgobrick@nfld.com>
Subject: [3800] Wal-Mart Battery - One More Time
Message-ID: <2.2.32.19960908141841.008ca604@nfld.com>

Doug, Steve and QRP-L Gang,

Well curiosity got the best of me - I have one of the Canadian Tire/Wal-Mart etc 12 V Power systems and it has been working just dandy. Now here's the trick.

1. Take the back off the unit to see what's inside - there must be different models out there - here's what I have:

Two 6 volt 4.0 amp/hour Yuasa Sealed Rechargeable Lead-Acid Batteries model NP4-6 (\$15.95 US each from MCM Electronics). I may be wrong here but these are "gell-cell" type lead-acid batteries. The Yuasa brand is commonly used in security systems etc and I have no trouble with this brand of sealed lead-acid batteries. I also don't know if the sealed acid batteries have a problem performing while laying on their sides (I seem to perform OK watching TV that way - hi)

Specs off the battery are: are: Standby 6.75 - 6.90 Volts unlimited charge rate

Cycle 7.2 - 7.5 Volt 1 amp charge rate

My unit is charged from a wall type charger. I have heard of a few units having some poor soldering connections inside so if you are having charging problem check those solder joints out. Anyway for the price I'd try to get the unit working (or return for a working unit) since you just can't beat having a nice portable 12 V source with built in light for those hurricane days at home.

2. Hint - take the advice of qrp-ler Rick McNelly KE4IZH. Under his direction I installed a Radio Shack Push On/Push Off Soft-Feel Switch (RS 275-1565B) on the top of the lantern side of the clam shell case. This switch is in series with the red wire that goes from the cigarette lighter power sockets to the printed circuit board. Basically it turns off the power eating LED and regulator circuits (about 23 milliampere) but leaves the 12V for the lighter sockets - good idea from Rick. Also to measure current flow from the batteries to your rig you can stick your amp probes in where the 15Amp car fuse goes - good way to check current.

I made one other mod that changes the 3 volt DC barrel jack to 12 volts - you have to do some playing with this (remove diodes etc) so if your cigarette lighter jacks work OK stick with that method of providing power to your rig. You can buy preassembled cigarette lighter plugs to DC coaxial plugs at your friendly Radio Shack (what would we do without having a Radio Shack in EVERY neighborhood???)

So good luck all and happy QRPing when you're otherwise in the dark during the hurricanes.

73/72 Bob V01DRB/WA6ERB

For info:

At 23:08 9/7/96 -0500, you wrote:

>I bought my unit from Canadian Tire in Halifax. After 10 hrs charging
>from car cigarette lighter voltage was only 11.4 volts. Full charge light
>never came on. I'm taking it back and getting my money refunded.

>Cheers, Doug, VE4STD

>

>On Fri, 6 Sep 1996, Steve Slavsky wrote:

>

>>

>> Not to beat a battery to death, but I popped open the Wal Mart MVP power
>> system. Mine (and maybe all) has two sealed lead acid President 6 volt
>> 4ah batteries in it. They ARE NOT Gel cells. I still can't get mine
>> above about 12.2 volts, even charging at 14.5 volts from an adjustable
>> power supply. The lead acid batteries lay on their sides in the unit
>> when it is standing up. Not very confidence building. I did not hear
>> boiling when I charged it, but the full charge light did go on after a
>> long while.

>> Steve, N4EUK

>> Reston, VA

| Bob Gobrick - V01DRB/WA6ERB/VE2DRB - Newfoundland, Canada |
| QRP'er Galore - QRP ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |

| Internet: rgobrick@nfld.com |
Compuserve: 70466.1405@compuserve.com

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: "Paul R. Valko" <prvalko@Oakland.edu>
Subject: [3791] Re: 49 er toroids
Message-ID: <Pine.OSF.3.91.960908022657.28507D-100000@vela.acs.oakland.edu>

On Sat, 7 Sep 1996, Ron Giuntini wrote:

> I forgot...what type of wire, how many turns do you use to replace the
> chokes on the PA on a rev B board?

Ron. I have NO IDEA, I found a computer switching power supply board (NO
jokes from QRP-L old timers, please) and busted the "flyback" transformer
open and stole the enameled wire out of it. Looks like 28 or 30 GA.
Works FB.

73 =paul= wb8zjl

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: john andrews <jm165723@eee.org>
Subject: [3810] Re: Berlin Files on Index Labs QRP+/QRP++
Message-ID: <3232FA6A.3B6E@eee.org>

NoesisDG@aol.com wrote:

>
> Can anyone help me with a URL (preferably to an English language web page)
> for a Berlin QRP club that carries mods and firmware changes for the Index
> Labs QRP++/QRP++?
>
> When I spoke to Bruce Franklin at Index Labs some time ago he mentioned that
> there was a group of enthusiasts in Germany who had disassembled and
> commented at least part of the firmware coding for the QRP+ (it tickled him
> that someone was taking the time to do that). He's not on the Internet so
> couldn't provide any URLs.
>
> I have a couple of firmware mods (one to change the fast tuning rate for the
> frequency dial) that I worked out with Bruce but would like to see more.
>

a wavelength. With the ATU, the length is not critical. I have used 102, 99 and 88 feet, all with good results on 40, 20. They have worked on 15 and 10 but with the poor prop, its hard to make any claims. I have used 450 and 300 ohm lines, and settled on 300 just because its easier to handle and lees of a neighborhood conversational item.

Our employee club FD station used an 88 ft CFZepp with 300 ohm twin lead and an ATU. That station did very well with only 5 watts from an OHR Classic (via KR4ZD). It was solar powered.

CUL Bill, 73, Bob

-----6B43739AA38
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="FOOTER.TXT"

+-----+
| Bob, AE4CA, WAS-5W | "QRP", more from less....
+-----+
ARCII-8760, MIQRP-1410, COQRP-118, QRPL-606, ARS-145, NorCAL

-----6B43739AA38--

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: KT3A@aol.com
Subject: [3826] Re: code trainer
Message-ID: <960908194021_1142416181@emout12.mail.aol.com>

In a message dated 96-09-08 16:53:56 EDT, GREGOIRE@ENDOR.COM (ERNEST GREGOIRE) writes:

> This device keeps me honest. I use it in the car, as well as
> at boring meetings.
Great Idea!
Now how do you get away with that??
Tell everyone it's your new hearing aid? ;-)

72 de cameron ,kt3a

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [3823] Re: <http://laplaza.taos.nm.us/~ebear/coaxlist.html>
Message-ID: <199609082241.WAA23910@chuck.dallas.sgi.com>

Dale Diaguila sent me a copy of the html from

<http://laplaza.taos.nm.us/~ebear/coaxlist.html>

If you don't have this puppy as a bookmark, you outta be ashamed. Just about everything listed. Not a whole lot of technical stuff like losses, but very good info indeedy.

Thanks again Dale. I'm copying this to qrp-l.

FYI

dit dit

Chuck Adams (K5FO CP-60) adams@sgi.com

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: Joe Everhart <n2cx@voicenet.com>
Subject: [3801] Re: Inverted - V Problem
Message-ID: <199609081517.LAA20344@mail.voicenet.com>

Luke,

Your difficulty with the antenna is not unusual. Been there, done that! In fact I'm just now putting the finishing touches on an article on that very subject for the QRP Quarterly (aside: Ron, who is the appropriate editor?)

Low dipoles are not a band match to 50 ohm coax. In fact the impedance doesn't get near the free-space value of 72 ohms until the dipole is 1/2 wavelength high. My best results with inverted vees are when the center is at least 20 feet above ground and the ends are at least 7-8 feet above ground or other conducting materials such as metal fences, etc. If it is too low, the SWR may be high - my article describes just such a condition!

The way I usually tune a dipole is to make it a little bit longer than the rule-of-thumb formula ($L(\text{ft}) = 234/F(\text{MHz})$) then measure where it is resonant and go from there. The

resonant frequency is where the SWR is lowest. It is also good to measure the 2:1 SWR points to get an idea of the bandwidth. Knowing the resonance point, calculate a new length for the antenna using the formula:

$$L(\text{new}) = L(\text{old}) * F(\text{reson}) / F(\text{desired})$$

Now lower the antenna and adjust its length to the calculated value and re-raise it. Measure the new resonant frequency and bandwidth. Unless something has gone drastically long, it should show a low SWR where you want it.

I am usually able to get a dipole or inverted vee SWR reading of 1.5:1 or less at the *best* frequency. And if the SWR is this low where I want to use it, I don't bother readjsuting though it may be lower elsewhere.

BTW you say that the dipole is within a meter of the desired length. This may not be close enough. This is only within 2.5% of the desired value and that deviation might be enough to take you too far off resonance to get a low SWR.

Good luck and let us know how you make out!
72/73,

Joe E., N2CX

work: jeverhart@cayman.vf.mmc.com
home: n2cx@voicenet.com

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: Monte Stark <ku7y@sage.dri.edu>
Subject: [3806] Re: Inverted - V Problem
Message-ID: <Pine.SUN.3.90.960908092203.20857D-1000000@vortex.sage.dri.edu>

On Sun, 8 Sep 1996, Joe Everhart wrote:

> results with inverted vees are when the center is at least
> 20 feet above ground and the ends are at least 7-8 feet
> above ground or other conducting materials such as metal
> fences, etc. If it is too low, the SWR may be high - my
> article describes just such a condition!
>

My last inverted vee had the 160 wires tied off to some sage

brush. Biggest problem was the wild horse's getting all tangled up in it and pulling it all over!

Never did find a ATU that would handle that..... :-)

cul,

73, Ron,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: rnflyer@usa.pipeline.com (Rick Nash)
Subject: [3807] Re: Inverted - V Problem
Message-ID: <199609081629.QAA05407@pipe16.h1.usa.pipeline.com>

On Sep 08, 1996 11:17:19, 'Joe Everhart <n2cx@voicenet.com>' wrote:

>Luke,

>

>Your difficulty with the antenna is not unusual. Been there,
>done that! In fact I'm just now putting the finishing
>touches on an article on that very subject for the QRP
>Quarterly (aside: Ron, who is the appropriate editor?)

>

>Low dipoles are not a band match to 50 ohm coax. In fact
>the impedance doesn't get near the free-space value of 72
>ohms until the dipole is 1/2 wavelength high. My best
>results with inverted vees are when the center is at least
>20 feet above ground and the ends are at least 7-8 feet
>above ground or other conducting materials such as metal
>fences, etc. If it is too low, the SWR may be high - my
>article describes just such a condition!

>

>The way I usually tune a dipole is to make it a little bit
>longer than the rule-of-thumb formula ($L(\text{ft}) = 234/F(\text{MHz})$)
>then measure where it is resonant and go from there. The
>resonant frequency is where the SWR is lowest. It is also
>good to measure the 2:1 SWR points to get an idea of the
>bandwidth. Knowing the resonance point, calculate a new
>length for the antenna using the formula:

>

> $L(\text{new}) = L(\text{old}) * F(\text{reson}) / F(\text{desired})$

>
>Now lower the antenna and adjust its length to the calculated
>value and re-raise it. Measure the new resonant frequency
>and bandwidth. Unless something has gone drastically long,
>it should show a low SWR where you want it.
>
>I am usually able to get a dipole or inverted vee SWR reading
>of 1.5:1 or less at the *best* frequency. And if the SWR is
>this low where I want to use it, I don't bother readjsuting
>though it may be lower elsewhere.
>
>BTW you say that the dipole is within a meter of the desired
>length. This may not be close enough. This is only within
>2.5% of the desired value and that deviation might be enough
>to take you too far off resonance to get a low SWR.
>
>Good luck and let us know how you make out!
>72/73,
>
>Joe E., N2CX
>
>work: jeverhart@cayman.vf.mmc.com
>home: n2cx@voicenet.com
>
>

Guys:

I use a G5RV Jr with the center up 12 feet; suspended from my deck. Each end is supported using a 3 foot fence post 25 ft from the center support. Each leg is at an angle of $\tan^{-1}(12/25)$ or 25 degrees with the horizontal. With my MFJ-949E tuner; my SWR on 40 M novice band is 1.5. The G5RV Jr is a 10 - 40 M dipole 51 feet long with 19 feet of ladder line. I use 50 feet of RG-213 coax. MFJ suggests using 42-52, 73-83, 112-123, or 145-155 feet of feedline. They also suggest not using 32, 64, 96, or 128 feet of feedline. Why; i don't know, i'm not an antenna designer!!! From my limitted experience I would suggest opening up the inverted vee angle as big as you can get it, and check the feedline length. I couldn't begin to get my 40 M dipole 1/2 wavelength in the air.

Rick KB0TCY

Rick KB0TCY

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996

From: N5EM@aol.com
Subject: [3812] Re: Inverted - V Problem
Message-ID: <960908134234_474200943@emout18.mail.aol.com>

Luke - use the force.

Sorry, couldn't resist. One problem typical of tuners at low frequencies is the extremely sharp tuning. Fair to say that the best tuners for 40 and down have vernier drives on the caps.

Next session, start with the caps in mid-range. Adjust the inductor for a reflected power dip. Then, VERY SLOWLY AND CAREFULLY, adjust one of the caps looking for some indication of a dip. Go to the other cap. If you find the dip at the extreme range of both caps, try the next larger inductance value and begin again. Each time you change caps, use the absolute slowest speed you can tune it.

I have never failed to tune any antenna, but some of them have required 15 to 20 minutes of extremely delicate fiddling to find those two exact spots on the caps to get the job done. If you can borrow a different tuner with vernier drives by all means, do it. After this one, you may even consider drives on yours.

Another thing to do if vernier drives are not possible is to change out the knobs on the caps for the largest diameter ones you can fit on the panel.

The MFJ 9xx series that I have at home (can't remember from Phoenix) has knobs that are entirely too small for delicate twiddling. I keep promising to put verniers on the front of the thing but you know how that goes.

Good luck.

72 from sunny Arizona
Ed, N5EM

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: Phil Wheeler <pcw12@ix.netcom.com>
Subject: [3816] Re: Inverted - V Problem
Message-ID: <32330971.528A@ix.netcom.com>

I always cut too long and then trim until I get it close. Y0u should be able to get 1.2:1 or so with NO tuner. Having an SWR tester (MFJ-259, Autek RF-1) really helps.

Phil W7U0X

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: watkins <watkins@socketis.net>
Subject: [3802] Re: Juno Bugs
Message-ID: <3232E616.266D@socketis.net>

> It's vey unusual to see Juno bugs in September!!! (groan)

ESPECIALLY this far south!

Daniel
ab0al

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: Vic Simpson <vsimpson@boco.demon.co.uk>
Subject: [3783] Re: JUNO USERSt
Message-ID: <GzoMtLAUBiMyEwSa@boco.demon.co.uk>

In message <199609080001.UAA12446@ll.aa2ys.ampr.org>, Rich Mulvey
<mulveyr@ll.aa2ys.ampr.org> writes
> A General Protection Fault is Window's way of telling you that a
>program tried to perform an illegal operation, like using memory that
>another piece of software was using. It's basically saying that there
>is a bug. :-)

>

>- Rich

Sad to say, even bunches of garlic around the screen fail to keep them
at bay. Anyone still hanker after vanilla dos and the world before
GPF's?

Off -or rather on- the point, anyone succeeded in building a ZS6BKW
multiband antenna? (Rather like G5RV but matches on more bands. Needs
a 400 ohm feeder.)

73 de G0BVZ, Vic

RSGB G-QRP AGCW ARCI(When I remember to renew!) SCAG DIG QRP-L #666

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: Rich Mulvey <mulveyr@ll.aa2ys.ampr.org>
Subject: [3797] Re: JUNO USERSt
Message-ID: <199609081335.JAA15342@ll.aa2ys.ampr.org>

>

> In message <199609080001.UAA12446@ll.aa2ys.ampr.org>, Rich Mulvey

```
> <mulveyr@ll.aa2ys.ampr.org> writes
> > A General Protection Fault is Window's way of telling you that a
> >program tried to perform an illegal operation, like using memory that
> >another piece of software was using. It's basically saying that there
> >is a bug. :-)
> >
> >- Rich
> Sad to say, even bunches of garlic around the screen fail to keep them
> at bay. Anyone still hanker after vanilla dos and the world before
> GPF's?
>
```

Yes, but the same thing would happen in the good old DOS days, except that your machine would just randomly crash, instead of giving you a little advance warning that it was about to crash.

Of course, I use Linux, so I don't have to worry about such things. ;-)

ObQRP: I just got the antennas back up after a month long hiatus. Do they work as well when they are assembled in the rain, as they do when they're assembled in a blizzard?

- Rich

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: Vic Simpson <vsimpson@boco.demon.co.uk>
Subject: [3825] Re: JUNO USERSt
Message-ID: <+0o8gLAWB1MyEw11@boco.demon.co.uk>

In message <199609081335.JAA15342@ll.aa2ys.ampr.org>, Rich Mulvey
<mulveyr@ll.aa2ys.ampr.org> writes
>>
>> In message <199609080001.UAA12446@ll.aa2ys.ampr.org>, Rich Mulvey
>> <mulveyr@ll.aa2ys.ampr.org> writes
>> > A General Protection Fault is Window's way of telling you that a
>> >program tried to perform an illegal operation, like using memory that
>> >another piece of software was using. It's basically saying that there
>> >is a bug. :-)
>> >
>> >- Rich
>> Sad to say, even bunches of garlic around the screen fail to keep them
>> at bay. Anyone still hanker after vanilla dos and the world before

>> GPF's?

>>

> Yes, but the same thing would happen in the good old DOS days, except
>that your machine would just randomly crash, instead of giving you a little
>advance warning that it was about to crash.

Yup, once or twice a year, regular as clockwork. Happens more often
under Windows, so lots of folk say...

> Of course, I use Linux, so I don't have to worry about such things. ;-)
Oh yes, the old original "Plug & Play" OS. Some folk have it easy.

> ObQRP: I just got the antennas back up after a month long hiatus.
>Do they work as well when they are assembled in the rain, as they do
>when they're assembled in a blizzard?
Absolutely. My hill antennas are outstanding and it rains every time I
go near them. High wind seems to improve the benefits of the rain. On
site soldering in wind and rain is most fun; I recommend Propane rather
than butane.

73 de G0BVZ, Vic

RSGB G-QRP AGCW ARCI(When I remember to renew!) SCAG DIG QRP-L #666

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996

From: George Gingell <k3tks@u1.abs.net>

Subject: [3822] Re: NOT 666

Message-ID: <Pine.BSI.3.93.960908182218.28093A-100000@u1.abs.net>

It is a religion thing. The reference is to the "Mark of Satan"
from Revelations. I did draw # 216 on the QRP-L Membership numbers,
However, I refuse to accept it as a "Sign" of Being one of his followers.
I am in fact an Elder in The Church of Jesus Christ of Latter-Day Saints.
(Also known as "Mormons").

The comment was referring to the fact that 6 to the third power is 216.

$6 \times 6 = 36$ $36 \times 6 = 216$ either way, 666/216 I refuse to accept it.

If I really felt that the implied meaning was relative, I would INSIST
on a number replacement. Since I don't, I will just drop the matter.

GB u es urs

QRP DX TU (C) 1986 G.Danny Gingell, K3TKS@.abs.net

On Sat, 7 Sep 1996, Dan Hogan wrote:

> Uh...what is so special about 666 and 216?

>

> Dan Hogan

> West Covina, CA

> dhhogan@lightside.com
>
>

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: "Paul R. Valko" <prvalko@Oakland.edu>
Subject: [3790] Re: Ohio, Indiana, Michigan QRPers??
Message-ID: <Pine.OSF.3.91.960908021336.28507B-100000@vela.acs.oakland.edu>

On Sat, 7 Sep 1996, Bill Kelsey - N8ET - Kanga US wrote:

> Paul - Does that mean it would be worth my time to make a sales trip
> to the hamfest in Mt Clemens next weekend??

Oh heck! ***I*** and several other die-hard QRP ops would *LOVE* to see you... but, sadly, I seriously doubt that you would do more than shake a few hands. These too swaps are for some odd reason very small although the LC swap has been in existence for well over 20 years.

Just too much to do up here in MI in the fall - I guess.

73 =paul= wb8zjl

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: Alex Mendelsohn <alexm@pennwell.com>
Subject: [3808] RE: QRP-L digest 476
Message-ID: <D779102E01E40200@smtp.pennwell.com>

It's interesting to see the discussion on the Heath SB-104 here on the QRP-L listing. During the 1970s I was a bench service technician at the Heathkit Jericho (NY) store. At the time, the company had 42 retail stores around the country, and sales were booming.

It was really a lot of fun to serve the Amateur Radio community back then. Many of the locals would come into the store to browse and chew the rag, and a lot of hams bought kits as well. I'd often put the equipment on the air in order to test it. The store manager was an Amateur (now W4FLA) and so were a number of the other technicians and sales people. It was the

perfect job for a ham!

If anyone's interested in knowing about mods for the SB-104, I still have a marked-up schematic reflecting a number of very significant changes I routinely made to the rigs I serviced. Although most were sanctioned by Heath, some were my own (although the company eventually adopted these after checking them out). I'd be happy to share these with the QRP-L group.

BTW: I'm looking for a used Omni-5 or Omni-6. Does anyone know of one for sale?

BTW2: I still use my vintage Heathkit station almost daily (an SB-303 receiver, SB-401 exciter, SB-220 amplifier, SB-620 panadapter and SB-610 monitor scope.

Vy 73, Alex, AI2Q, in Kennebunk, Maine .-.-.

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: Phil Wheeler <pcw12@ix.netcom.com>
Subject: [3813] Re: RG 174U
Message-ID: <323308A7.4CF6@ix.netcom.com>

The custom is to use BNCs. But I find that to be pretty masochistic!! If you're not into pain and frustration, you may want to use a PL-259 and to the best job of fitting you can.

Phil W7UOX

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: Vic Simpson <vsimpson@boco.demon.co.uk>
Subject: [3792] Re: scQRPions meeting report
Message-ID: <0gPwZGAJwhMyEwEr@boco.demon.co.uk>

In message <v02130502ae5791664ae1@[192.91.202.41]>, Kent Torell
<torell@sicom.com> writes
Snip..

>72, from Phoenix, Arizona...scQRPion country! [qrp is not for sissys! (tm)]
Unfair to sissies! QRP is an equal opportunity hobby...
73 de G0BVZ, Vic
RSGB G-QRP AGCW ARCI(When I remember to renew!) SCAG DIG QRP-L #666

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: "Paul R. Valko" <prvalko@oakland.edu>
Subject: [3789] Re: TEN-TEC Triton I info pse.
Message-ID: <Pine.OSF.3.91.960908020933.28507A-100000@vela.acs.oakland.edu>

On Sat, 7 Sep 1996, GARY McCAUGHEY wrote:

> Hello,
> Just got a Triton I at a hamfest and was wondering what the TEN-TEC groupies
> have to say about it. What year was this thing produced? Any other
> comments, good or bad.

The Triton I is and Argonaut 505 on steroids. Whenever I play with one of them (or a Power Mite) I am amazed that Ten*Tec stayed in business.

How they went from something as humble as a PM-1 to something as awesome as the Omni VI is a mystery!

73 =paul= wb8zjl
collector of Ten*Tecs and other fine plastics

From owner-qrp-1@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: wq8q@juno.com (Rick Tyler)
Subject: [3798] Re: Wal-Mart Battery
Message-ID: <19960908.094348.7719.6.wq8q@juno.com>

I bought two of the units from WalMart and they're working fine. Followed the directions that came with them, which basically said to get full charge you had to charge them with no at least 13.8vDC and no greater than 15.5vDC @ no greater than 750ma but at least 200ma.

I quote further from the instructions:

"Minimum voltage required to initiate a charge cycle: 13.8
Prolonged charging at that voltage will not full charge the batteries in this system, so you may finish the charge in your vehicle. The ideal charging rate would be 14.8 - 15.5 volts nearly identical to the charging systems in most vehicles. As this implies, a vehicle must be running and the charging system functioning properly in order to initiate a charge."

I found a 700ma 15.5v wall wart (leftover from a telephone answering machine) rewired the plug and it charges them to 12.8v, which is just fine for both QRP operated rigs. I use the other one in my tool kit to run my 150ma digital Yamaha piano tuning device. I can run a week without having to recharge and the light comes in handy for finding errant objects in dark pianos. NO problems!

73 de Rick, WQ8Q
Cincinnati

From owner-qrp-l@Lehigh.EDU Sun Sep 8 23:13:11 1996
From: Dan Hogan <dhhogan@lightside.com>
Subject: [3827] Re: WB8VGE postal address
Message-ID: <m0uztop-0006k8C@covina.lightside.com>

Try:

QRP Amateur Radio Club International
Mike Bryce WB8VGE
P O Box 508
Massillon, OH 44648-0508
Membership \$17.00/Yr

You can also try him at 73357.222@Compuserve.com

Dan Hogan WA6PBY QRP-L #558, CQC #340, NorCal, ARRL
dhhogan@lightside.com
Lat. 34d 03' 49.7' N
Lo. 117d 56' 09.6' W Grid: OM84wc